

OPTICAL SECURITY SYSTEM USING FOURIER PLANE ENCODING

~~ABSTRACT OF THE INVENTION~~

A method of verifying the authenticity of an object is presented. The method comprises providing a primary image; providing a secondary image; encoding the primary image; providing a random code; convolving the encoded primary image with the random code, providing thereby a reference image; affixing the reference image to the object to be authenticated; transforming the reference image; and comparing the transformed reference image with the secondary image. A system for verifying the authenticity of an object is presented. The system comprises a signal source; a first subsystem receiving a first signal from the signal source and providing as output therefrom a first output signal; a second subsystem receiving a second signal from the signal source and providing as output therefrom a second output signal; a third subsystem receiving the first and second output signals for comparing the first output signal with the second output signal.